DOCUMENT RESUME

ED 022 845 24 VT 002 335

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SPECIAL TRAINING PROJECT FOR EDUCATIONAL RESEARCHERS IN THE NATION'S LARGE CITIES. DECEMBER 1, 1966-JANUARY 31, 1967. FINAL REPORT.
Ohio State Univ., Columbus. Center for Vocational and Technical Education.
Spons Agency-Office of Education (DHEW), Washington, D.C.
Bureau No-BR-7-0402
Pub Date Mar 67
Grant-OEG-3-7-070402-1616
Note-77p.
EDRS Price MF-$0.50 HC-$3.16
Descriptors-EDUCATIONAL PROBLEMS, *EDUCATIONAL RESEARCH, *EDUCATIONAL RESEARCHERS, *INSTITUTES (TRAINING PROGRAMS), RESEARCH NEEDS, RESEARCH PROPOSALS, URBAN AREAS, *VOCATIONAL EDUCATION

A vocational-technical education research institute provided training for 40 members of educational research staffs, the majority of them from larger cities (over 100,000 population), the others from universities, regional education laboratories, state education departments, and research coordinating units. Objectives of the program focused on the role and function of research in shaping vocational-technical education programs in the nation's big cities. An effort was made to up-grade the trainees' research competence and to familiarize them with available resources. The 5-day instructional phase of the program ran in conjunction with the annual meeting of the American Vocational Association, giving trainees an opportunity to participate in selected aspects of the convention program and providing a source of professional resource persons. The agenda included lecture-discussion presentations, panel discussions, individual and team discussion sessions with project staff, and small group meetings wherein 10 teams of four people identified a priority problem in vocational education, then designed and developed a proposal outline for researching the problem. Appended are publicity materials, a list of participants, and the 40-page proposal outlines for 10 priority-problem studies. (MM)

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FINAL REPORT
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SPECIAL TRAINING PROJECT FOR EDUCATIONAL RESEARCHERS IN THE NATION'S LARGE CITIES

MARCH 1967

U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

Office of Education
Bureau of Research

SPECIAL TRAINING PROJECT FOR EDUCATIONAL RESEARCHERS IN THE NATION'S LARGE CITIES.

Grant No. OEG 3-7-070402-1616

Virgil E. Christensen
Program Director

December 1, 1966 - January 31, 1967

The training program reported herein was conducted pursuant to a grant from the Office of Education, U.S. Department of Health, Education, and Welfare. Grantees undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment of the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

The Center For Vocational And Technical Education
The Ohio State University
Columbus, Ohio

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APPENDICES

Orientation of Program

This special research training project provided training for 40 individuals; the majority being from the educational research staffs of the nation's larger cities (over 100,000 population) and the remainder from related educational agencies (universities, regional education laboratories, state education departments and research coordinating units).

The instructional phase of the program was carried out in Denver, Colorado during the period December 5-9 running concurrently and in conjunction with the annual meeting of the American Vocational Association.

The specific objectives of the program were:

1. To develop a recognition of the role and function of research in shaping vocational-technical education programs in the nation's big cities.

2. To create an awareness in research leadership of the resources available to assist big cities in planning and developing an effective vocational-technical education research program for big cities.

3. To up-grade the research competence of those individuals charged with leadership responsibility for the vocational-technical education research program in large cities.

4. To identify the components of and design for an effective vocational-technical education research program for big cities.

The program was organized and carried out in such a way that at the end of their training experience, the participants were expected to have:

1. An awareness of the importance of research for optimum expansion and development of vocational education programs in metropolitan centers.

2. An acquaintance with the various resource agencies and personnel available to assist with research and development programs.

3. Additional confidence in his ability to marshall the human and technical resources necessary to initiate and expedite provocative and meaningful research probes into vocational curriculum and instruction matters.

4. The ability to coordinate interdisciplinary and field resources as an integral part of a big city research program.

5. A knowledge of the research completed or in programs which has relevance to vocational education programs.

6. The ability to communicate with other members of a vocational education research team.

7. An understanding and familiarity with research designs applicable to various types of vocational education research problems.

8. A knowledge of current procedures found effective in carrying out vocational education research and development programs in large urban centers.

Description of the Program

The training program began at 8:30 a.m. on Monday, December 5 and closed at 12:00 noon on Friday, December 9. The daily schedule began each day at 8:30 and closed at 5:00 with these exceptions:

a. Required attendance of the participants at two evening general sessions of the American Vocational Association (AVA) to hear an address by Dr. Albert T. Sommers, Vice President, Economics Research Division, The National Industrial Conference Board, and an address by Dr. Ashley Montagu, noted social anthropologist, writer and lecturer.

b. Voluntary attendance at AVA sessions of participants own choice on one afternoon.

c. Small group work sessions as needed to complete assigned team activities.

A significant aspect in the planning, timing and setting of this Special Training Program was its proximity to and potential for involvement by trainees in the research aspects of the annual meeting of a national association of professional educators.

The training schedule included participation in and attendance by the trainees in selected portions of the AVA convention program. It also permitted the trainees time to discuss vocational education problems and programs with outstanding vocational teachers, supervisors, teacher educators, administrators, board members, local and state directors from across the nation.

The assemblage of national vocational education talent was also utilized in securing resource persons for the training program. This feature provided professional talent that very likely would otherwise not have been available time-wise and cost-wise. The outstanding educational exhibits featured at this annual meeting also provided an additional benefit to the trainees.

The program agenda included: a) presentations by such outstanding specialists knowledgeable in both research and vocational education as Dr. F. Parker Wilber, President of Los Angeles Trade and Technical College and Dr. Fred Bertolaet, Professor of Education, University of Michigan; b) presentations and open discussion sessions on research strategies by two leading research specialists, Dr. Joseph L. Mazur, Director, Bureau of Research, Cleveland Public Schools and Dr. Harry Handler, Research Consultant, Southwest Regional Educational Laboratory; c) lectures, followed by reactions of selected discussants and then followed by open discussion sessions. This included a lecture on "Research Techniques and Designs" by Dr. Loyal W. Joos, Director of Systematic Studies, Oakland Schools, Pontiac, Michigan and a lecture on "Practical Aspects of Research in Vocational Education" by Dr. J. Wayne Wrightstone, Assistant Superintendent, Bureau of Educational Research, New York Public School System; d) a panel discussion on "Research in Progress" lead by a key resource person Dr. Louis J. Kishkunas, Assistant Superintendent and Director of Occupational-Vocational-Technical Programs, Pittsburgh Public Schools; e) a panel discussion with selected participants making up the panel; f) small group work sessions wherein ten teams of four members each identified a priority problem in vocational education, then designed and developed a proposal outline for researching the problem (a 38 page report on this area of activity is included in Appendix D); and g) individual participant and team discussion sessions with project staff including Dr. Clyde Baer, Director of Research, Kansas City, Missouri Public Schools, Mr. Donald M. Brill, Project Coordinator, The Research Council of The Great Cities Program and Dr. Virgil E. Christensen, the project director.

The program resource personnel thus included: competent resource persons who could show tangible evidence as to ways that research has affected specific vocational education programs; outstanding vocational educators aware of the most pressing problems confronting urban vocational and technical education; experienced research design persons who could assist in the development and design of practical research projects; directors of research programs in the large cities who hold first hand knowledge of the resources available to carry out research in metropolitan areas; supervisors or directors of vocational education programs in the cities who knew, from daily contact, what the primary problems were for which research might be appropriate; staff members from on-going research projects who could report on current efforts, staff

members from leading universities, The Center for Vocational and Technical Education, Council of The Great Cities Program, regional education laboratories, state education departments, and research foundations.

Evaluation of the Program

1. Program Factors

a. Objectives

The objectives of the program were carried out as planned; the resource persons indicated and demonstrated that they understood them; the participants knew what they were; the number of favorable comments made by the trainees on their evaluation sheets would suggest that they were reasonably satisfied.

Thirty-two of the forty thought the institute had helped to increase their competency in their present job.

Thirty-eight of the forty thought that institutes of this type had a great deal to contribute to education.

Thirty-seven thought the new acquaintances they had made would help them in their future research efforts.

Thirty-one felt they had received guidance for future action.

Thirty-four said the objectives of the program were the same as theirs.

Only three of the forty felt their time and money were not well spent.

b. Content

The trainees apparently were satisfied with the program content.

Thirty-six out of the forty indicated the content presented was applicable to their needs.

Thirty-four out of the forty indicated the material presented was valuable to them--the remaining six were undecided.

Thirty-one of the forty thought the program of such merit that it would serve as a guide for future action.

These favorable reactions coupled with the responses made to the question, "How do you plan to apply the outcomes you have obtained from attending this institute?" (see page 11) suggests that the project will have considerable long range yield.

The team assignment, wherein ten teams of four trainees each were asked to identify and outline a Big City problem in vocational-technical or occupational education, was the least well accepted part of the institute program. The necessity to schedule team work after 5:00 p.m., the differences in research design competencies among team members, and the demands of the task under severe time limitations were causal factors. It should be mentioned, however, that some listed this as one of the more valuable experiences. The ten team reports were edited by the director after the institute training period and distributed to the trainees. Many institute participants indicated, after reviewing the complete report (Appendix D) they now had a more favorable regard for this phase of activity. This would suggest some advantage in immediate feedback were this program activity to be repeated again.

c. Staff

The use of two competent and experienced resource persons as full time assistants to the director during the five day training institute worked out very well. Their efforts as panel moderators, discussion leaders, resource persons for team activities, individual trainee counseling, and overall program coordination were essential. This phase of the staffing pattern would be repeated were the institute to be held again.

The use of seven program resource persons, each asked to make a major contribution on the program was not a good decision. This created a situation with too many formal presentations--too much show and tell. A better approach would have been one using fewer resource persons as presentors, having each make more than one presentation and allowing for more small group discussion with the consultant. The evaluation sheets indicated that thirty-three of the forty trainees thought the program had well chosen consultants but at the same time thirty-two indicated the program had too little discussion time.

d. Trainees

By limiting the group to forty participants it was possible to stay within prescribed budget and physical facility limitations as well as maintain a group small enough to permit individual participation, yet large enough to acquire a good variety of contributions. A very good geographic distribution was obtained with forty trainees representing twenty-four different states.

The evaluation sheets indicated the trainees thought they had ample opportunity to express their ideas. However, only twenty-one of the forty responded that they really felt a part of the group--ten were undecided. This mixed reaction to others in the group may have resulted from the screening committee's attempt to select a vocational educator--educational researcher mix. Five days in a rather formal instructional situation was apparently not enough time to permit the desired participant interaction.

The selection criteria, as set forth in the proposal narrative (Appendix A; Pages A-3, A-4) proved to be satisfactory. The program was able to recruit persons of high ability who, while they may in some cases have lacked the desired background of research courses, were in positions of responsibility for giving leadership to vocational education research programs in the school systems of large cities. (see Appendix B for Training Institute participant list).

e. Organization

The concurrent scheduling of the institute at the time and place of the American Vocational Association (AVA) Annual Convention was a good choice. The trainees indicated on their evaluation sheets and in follow-up letters that this was an excellent way to obtain double yield from their time and travel. Thirty of the forty participants said that the AVA program sessions they attended were very helpful and informative. The budget reflects an additional advantage in that several of the trainees were able to travel with colleagues who were attending the AVA Convention and thus did not require travel reimbursement from the institute funds. The convention setting, necessitating the use of hotel meeting rooms and hotel housing was, however, not particularly conducive to good training institute conditions. It

would be preferable to arrange for institute facilities with better lighting, fewer interruptions, a library and places to meet or study in semi-private surroundings.

Only eight of the forty trainees thought the five day training program was too long; most thought the program was very comprehensive and could not have been carried out in less time.

f. Budget

The entire training program was carried out at a cost of less than two hundred dollars per trainee with an average of about one hundred and fifty of this amount being used for travel reimbursement.

The amount of funds provided met the project needs and little change would be made if the entire effort were to be repeated.

2. Major strengths:

Probably the greatest strength of this program was its timeliness. It focused upon a research problem -- vocational education in the urban setting -- an issue that needs immediate attention. It was carried out at the time and place where thousands of vocational educators and their key leaders were meeting to discuss the current issues and research findings. This scheduling made it possible to obtain for this program the services of the nation's leading researchers in vocational education. It also permitted the trainees to participate in a supplementary learning activity during their free periods.

3. Major weaknesses:

A major weakness was the time alloted for the program or possibly in the directors decision as to the amount of material to be covered over the five day training period. The rush to cover too broad an area, too many ideas in too little time prevented the desired in-depth treatment of some topics, the needed amount of group discussion and permitted far too little time for the individual trainee to enter into a "give and take" discussion with the consultants.

Another weakness was evident in the procedure used for the laboratory exercise or team assignment. Five days did not permit the teams sufficient time to develop their report, have it edited, printed and distributed to other participants during the training institute. Thus a great deal of valuable discussion which could have been generated from the laboratory efforts was lost.

4. Overall evaluation

The general reaction is that this training institute fulfilled its stated purpose: to convey a specific body of knowledge--the role of research in shaping vocational and technical education in the nation's large cities--to a select, homogeneous group of relatively sophisticated researchers who have responsibilities for developing and carrying out research and development programs in large metropolitan centers.

The following is a summary of the responses made by the participants on the evaluation form:

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
The conference program was too long.	3	5	4	22	6
The purposes of this program were clear to me.	8	19	6	6	1
The objectives of this program were not the same as my objectives.	1	2	3	20	14
The program had too little discussion time.	14	18	1	6	1
The program met my expectations.	8	9	11	10	2
The program helped provide clear-cut and specific directions.	1	19	13	6	1

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
The content presented was not applicable to my needs.		3	1	33	3
The material presented was valuable to me.	12	22	6		
I did not have an opportunity to express my ideas.	2	10	3	21	4
I really felt a part of this group.	3	18	10	8	1
I have no guide for future action.		1	8	26	5
Seminars such as this will contribute little to vocational education.			2	17	21
My time and money were well spent.	12	20	5	3	
New acquaintances were made which will help in future research.	16	21	2	1	
This conference increased my competency in my present job.	8	24	6		2
The program had too little variety.		4	3	28	5
The program was timely.	14	22	2	1	1
We did not have enough time to participate in the AVA program.	9	11	6	12	2
The AVA program sessions attended were very helpful and informative.	4	26	7	2	1

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
The program had too much discussion time.	____	2	3	22	13
The program had well-chosen consultants (speakers)	10	23	7	____	____

How do you plan to apply the outcomes you have obtained from attending this institute? (Check the 2 most important)

7 Preparation of a research project.

11 Administration of research programs.

20 Increased ability to advise others in research planning.

7 Improvement of teaching or supervision.

8 Preparation of curriculum materials.

15 Increased knowledge of research in general.

11 Planning for vocational education facilities.

9 Planning of vocational training programs.

11 Use in present research projects.

1 Writing an article or other publication on this topic.

2 Other (please specify.) Program evaluation. Greater familiarity with problems facing vocational educators.

5. Recommendations

It would have been most helpful to have received the Statement of Appointment of Trainee forms prior to the institute rather than after completion. Also, it would be a real asset to the training project director to receive a copy of Instructions for Preparing a Final Report before the project is ended--in fact it would be most helpful to have it before the training activities begin.

Program Reports

1. Publicity

Letters were used as the principle means of announcing this training program. Letters (copies included in Appendix C) requesting nominations of potential participants were sent to the following:

a) the Superintendents of Schools in 135 cities over 100,000 population,

b) the State Director of Vocational Education in each of the 50 states,

c) the Directors of the 24 Vocational Education Research Coordination Units,

d) to 36 University and College faculty members across the nation who were named by Center Specialists as being knowledgeable about urban education research programs and the research persons involved.

2. Application Summary

a. Approximate number of inquiries from prospective trainees (letter or conversation) 193

b. Number of completed applications received 96

c. Number of first rank applications (Applicants who are well-qualified whether or not they were offered admission) 74

d. How many applicants were offered admission 48

3. Trainee Summary

a. Number of trainees initially accepted in program 40

Number of trainees enrolled at the beginning of program 40

Number of trainees who completed program 40

b. Categorization of trainees

(1) Number of trainees who principally are elementary or secondary public school teachers 2

(2) Number of trainees who are principally local public school administrators or supervisors 22

(3) Number of trainees from State education groups 5

(4) Number of trainees from colleges or universities, junior colleges, research bureaus, etc. (specify)

College or University 8
State Dept. of Labor 1
Post High & Jr. College 2

4. Program Director's Attendance

a. What was the number of instructional days for the program? 5

b. What was the percent of days the director was present? 100%

5. Financial Summary

		Budgeted	Expended or Committed
a.	Trainee Support		
	1) Stipends	-0-	-0-
	2) Dependency Allowance	-0-	-0-
	3) Travel	$5,800.00	$4,137.70
b.	Direct Costs		
	1) Personnel	$1,526.00	$1,668.28*
	2) Supplies	300.00	330.87
	3) Equipment	10.00	-0-
	4) Travel	1,766.00	2,048.69
	5) Other	156.00	60.58
c.	Indirect Costs	174.00	237.42**
		$9,732.00	$8,483.54

*Includes $152.00 of clerical assistance performed at The Center and $13.68 PERS on that assistance

**Includes 11.4% overhead rate on $1,502.60 and 43.5% overhead rate on $152.00

A P P E N D I X A

NARRATIVE

1. Type of Training Program

This proposal is for a special five-day training project for educational researchers working in the public school systems of the nation's largest cities. (Large to be interpreted herein as those cities [total of 135] over 100,000.)

2. Significance of The Training Program to Education

The research stimulus of Section 4(c) of P.L. 88-210 (Vocational Education Act) has created many promising new developments in research in vocational education. It has also created severe profession-wide problems in finding the qualified research personnel needed to capitalize upon the promises provided in the Act. Vocational education does not have a strong research tradition nor has it had well defined programs for developing competent, well-trained, sophisticated researchers. The practicing researchers carrying out the research in vocational education, today, as in the past, are those individuals whose training has been almost unanimously more vocational education than research methodology. It is very possible that there are no more than five to ten researchers across the entire nation devoting full time to research and development in vocational education who could appropriately be classified as competent researchers. The researcher whose training has been predominantly in a parent discipline has difficulty keeping abreast of the latest developments in research methodology, while the capable methodologist has difficulty communicating with the vocational practicioner. This is not an indictment of either group since across the nation most educational statisticians and methodologists would admit to severe training limitations.

This program is intended to attract dedicated professionals from educational research units who need assistance in research methodology as well as technical and conceptical assistance in a focus area of education.

3. Objectives of the Training Program

The specific objectives of the proposed special training programs are:

1. To develop a recognition of the role and function of research in shaping vocational-technical education programs in the nation's big cities.

2. To create an awareness in research leadership of the resources available to assist big cities in planning and developing an effective vocational-technical education research program for big cities.

3. To up-grade the research competence of those individuals charged with leadership responsibility for the vocational-technical education research program in large cities.

4. To identify the components of and design for an effective vocational-technical education research program for big cities.

At the end of their training experiences, the participants should have:

1. An awareness of the importance of research for optimum expansion and development of vocational education programs in metropolitan centers.

2. An acquaintance with the various resource agencies and personnel available to assist with research and development programs.

3. Additional confidence in his ability to marshall the human and technical resources necessary to initiate and expedite provocative and meaningful research probes into vocational curriculum and instruction matters.

4. The ability to coordinate interdisciplinary and field resources as an integral part of a big city research program.

5. A knowledge of the research completed or in programs which has relevance to vocational education programs.

6. The ability to communicate with other members of a vocational education research team.

7. An understanding and familiarity with research designs applicable to various types of vocational education research problems.

8. A knowledge of current procedures found effective in carrying out vocational education research and development programs in large urban centers.

4. Number and Selection of Participants

The proposed research training program will be open to a total of 40 persons--30 to 35 members representing the research divisions of the nation's large city public school systems and 10 to 15 members from related educational agencies (universities, regional education laboratories, state education departments, research foundations, etc.).

By limiting the group to 40 participants it is possible to stay within prescribed budget and physical facility limitations as well as maintain a group small enough to permit individual participation, yet large enough to acquire the variety of contributions.

Participant Selection Procedure

In order to be eligible, a participant must have been nominated for participation by the administrator or administrative authority in one of the nation's cities of over 100,000 population or by a state director of vocational education.

In addition, the participant should have the following:

1. An expressed interest in educational research.
2. Possession of a master's or higher degree.
3. Completed two or more basic courses in the areas of statistics, design, measurement, etc.
4. Present involvement in the conduct of or giving leadership to research in or related to vocational education in the big city schools.

Among those who meet the general requirements for invitation to the program, preference will be given to those who have completed at least two or more graduate or undergraduate courses in educational measurement, educational statistics, educational research or similar courses in psychology and related areas. However, the lack of such preparation will not automatically result in disqualification. We are vitally interested in recruiting persons of high ability who, while they may lack the desired background of research courses, are in or likely to be assigned to positions of responsibility for giving leadership to vocational education research programs in the school systems of large cities. It is this type of researcher who will profit most from the proposed training program.

Each nominee will be asked to furnish the program director with a brief description of his present position, brief detail as to previous training, educational and research experience,

plus a short statement concerning his primary motivations for attending and expectations from the program.

On the basis of information received, a four-man committee consisting of a state director of vocational education, a director or head of research from a large city school system, a representative from the American Vocational Association, and a representative from the Research Council of the Great Cities Program for School Improvement will review the application forms and establish a priority listing of recommendations. These recommendations, in turn, will determine the training program participants.

5. Educational Research Training Capability

This training program is scheduled to be held at Denver, Colorado, running concurrently with the annual meeting of the American Vocational Association (December 5-9). The five-day training program will utilize the conference facilities of a Denver Hotel (either the convention headquarters hotel or one adjacent) and such local educational and research facilities as required and arrangements permit.

The Center for Vocational-Technical Education at The Ohio State University with a staff of over 20 professional educators has demonstrated its capacity and effectiveness for planning, organizing and "following-through" on projects of the scope proposed. Center staff members have conducted more than a score of national seminars, institutes, workshops and research training programs over the past 18 months, involving several hundred educational leaders from all fifty states and the territories of Guam, Puerto Rico, and the Virgin Islands. Forty-nine state departments of education have had staff members participate. In addition, 185 institutions of higher learning have had representatives participate in Center sponsored activities. Included in the programs was the National Vocational-Technical Education Seminar on The Development and Coordination of Research (60 participants from 40 states) for which the project director of this proposal was seminar director.

A significant aspect in the timing and setting for this Special Training Program is the proximity to and potential for involvement by trainees in the research aspects of the annual meeting of a national association of professional educators.

The concurrent scheduling advantages were recognized by Mr. Lowell A. Burkett, Executive Director of Professional

Service for the AVA. It is with their recommendation, whole hearted support and assistance that plans for the training project have been carried forth.

The suggestions and recommendations from a number of the Directors of Research for the public schools in the nation's large cities have been incorporated into the program plans. Efforts will also be made to coordinate this project with the programs carried out by the Education Commission of the States, The Research Council of the Great Cities Program, regional education laboratories, etc.

The training schedule will include participation in and attendance by the trainees in selected portions of the AVA convention program. It will permit the trainees time to discuss vocational education problems and programs with outstanding vocational teachers, supervisors, teacher educators, administrators, board members, local and state directors from across the nation.

This assemblage of national talent will be utilized in securing resource persons for the proposed training effort. This feature will provide professional talent for the program that very likely would otherwise not be available time-wise and cost-wise. The outstanding educational exhibits featured at these annual meetings will provide an additional benefit to the trainees.

6. Program Outline

Schedule

The training program will begin at 8:30 a.m. on Monday, December 5 and close at 12:00 noon on Friday, December 9. The daily schedule will begin each day at 8:30 and close at 5:00 with these exceptions:

a. Required attendance of the participants at two evening general sessions of the AVA.

   1. 8:00 p.m.--Monday evening--Address by Dr. Albert T. Sommers, Vice President, Economics Research Division, The National Industrial Conference Board.

   2. 8:00 p.m.--Tuesday evening--Address by Dr. Ashley Montagu, noted social anthropologist, writer and lecturer.

b. Voluntary attendance at evening sessions of participants own choice.

c. Small group work sessions as needed to complete assigned activities.

Agenda

The program agenda will include: a) presentations by outstanding specialists knowledgeable in research and/or vocational education or both, b) presentations by specialists followed by open discussion, c) presentations by specialists followed by the reactions of selected discussants and this followed by open discussion with the entire group, d) panel discussions with resource persons on the panel, e) panel discussions with selected participants making up the panel, f) scheduled attendance of participants in four sessions of the AVA program, g) small group work sessions, h) individual participant and team sessions with program resource people.

Resource Personnel

The program resource personnel will include a) competent resource persons who can show tangible evidence as to ways that research has effected specific vocational education programs, b) outstanding vocational educators who are aware of the most pressing problems confronting urban vocational and technical education, c) experienced research design persons who can assist in the development and design of practical research projects, d) directors of research programs in the large cities who have first hand knowledge of the resources available to carry out research in metropolitan areas, e) supervisors or directors of vocational education programs in the cities who know, from daily contact, what the problems are for which research might be appropriate, f) staff members from on-going research projects who can report on current efforts, g) staff members from the U. S. Office of Education, The Center for Vocational and Technical Education, Council of The Great Cities Program, regional education laboratories, state education departments and research foundations.

7. Facilities

The training program will use the housing and conference facilities of the Hilton Hotel in Denver, Colorado. Adequate meeting and discussion room arrangements have been completed.

The library and instructional materials needed for the program will be made available from The Ohio State University library and from the library at The Center for Vocational and Technical Education.

The budget reflects a shipping allowance to be used for

transporting the essential instructional materials from Ohio State University to the program in Denver.

In addition, Dr. Joseph Brzeinski, the Director of Research for the Denver Public School system has offered local assistance in obtaining the needed equipment, materials and resources.

8. Other Related Support

None.

A P P E N D I X B

RESEARCH TRAINING INSTITUTE
December 5-9
Denver, Colorado

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Room 904 Schools Center
5057 Woodward
Detroit, Michigan 48202

A P P E N D I X C

August 24, 1966

To: Superintendents of Large Urban Schools
State Directors of Vocational Education

From: Robert E. Taylor, Director

Re: Research Training Institute

This is to alert you to and seek your assistance in planning and implementing a tentatively scheduled Research Training Institute at Denver, Colorado, November 29-December 7, 1966. The Research Institute will focus on the current concerns, the research priorities, the resources of the larger urban communities, and their relevancy to vocational and technical education. The training session will precede and interrelate its substantive efforts with those of the national conference of The American Vocational Association. The AVA will be meeting in Denver, December 5-8, 1966.

We request that you nominate one or more members from your staff who might be considered as a potential participant. We suggest the nature of the nominee's administrative and/or research responsibilities be sufficient basis for your organizations ability to benefit from the educational research training program. The program will reflect that vocational educational research content, which is the most viable, most appropriate, and most beneficial to the large city community, and will be designed to produce maximum yield for the participants.

The sponsoring agencies--The Center for Research and Leadership Development in Vocational and Technical Education, The Research Training Branch of the U.S. Office of Education, and the American Vocational Association--will provide transportation to and from the institute, will make arrangements for housing, and will provide the training and instructional materials. The represented school district will need to provide the per diem support for their own participants. The enrollment will be restricted to 40 to 50. This limiting will permit a selectivity and screening from among the nominations requested in this letter. A form and self-addressed envelope are enclosed to assist you in supplying the desired response by mid-September, 1966.

The accompanying nomination form includes a space, too, for you to assist in identifying researchers in related disciplines (e.g. Psychology, Urban Sociology, Labor Economics, or Educational Sociology) who have an interest in vocational, technical, and occupational research. You may have had occasion to be involved with these specialists in previous research efforts. We suspect that bright young "comers" in these areas can contribute significantly to the expanding research efforts in vocational education.

Thank you for your assistance and I trust your enthusiasm and interest will result in effecting improved research and program development in vocational education.

mmf/
zp

FORM FOR IDENTIFYING PROSPECTIVE PARTICIPANTS
IN RESEARCH TRAINING INSTITUTE

From Your Organization: Please name one, two, or three nominees

Name:_____

Position_____

Responsibility in Your Research Program:_____

_____

Professional Address:_____

_____

Name:_____

Position:_____

Responsibility in Your Research Program:_____

_____

Professional Address:_____

_____

Name:_____

Position:_____

Responsibility in Your Research Program:_____

_____

Professional Address:_____

_____

FORM FOR IDENTIFYING PROSPECTIVE PARTICIPANTS
IN RESEARCH TRAINING INSTITUTE

SUGGESTED RESEARCHERS FROM RELATED DISCIPLINES:
(e.g. labor economist, urban sociologist, psychologist, etc.)

Please name one, two, or three nominees:

Name:_____

Institution:_____

Position:_____

Area of Activity:_____

Address:_____

_____

Name:_____

Institution:_____

Position:_____

Area of Activity:_____

Address:_____

_____

Name:_____

Institution:_____

Position:_____

Area of Activity:_____

Address:_____

_____

Please return to:

The Center for Vocational and Technical Education
The Ohio State University
980 Kinnear Road
Columbus, Ohio 43212

August 24, 1966

TO: Directors of Research Coordinating Units and Selected College and University Faculty

FROM: Robert E. Taylor, Director

RE: Research Training Institute

This is to alert you to and seek your assistance in planning and implementing a tentatively scheduled Research Training Institute at Denver, Colorado, November 29-December 7, 1966. The Research Institute will focus on the current concerns, the research priorities, the resources of the larger urban communities, and their relevancy to vocational and technical education. The training session will precede and interrelate its substantive efforts with those of the national conference of The American Vocational Association. The AVA will be meeting in Denver, December 5-8, 1966.

We seek your help in identifying researchers in disciplines related to vocational education (e.g. Psychology, Urban Sociology, Labor Economics, or Educational Sociology) who have an interest in vocational, technical, and occupational research. You may have had occasion to be involved with these specialists in previous research efforts. We suspect that bright young "comers" in these areas can contribute significantly to the expanding research efforts in vocational education.

The sponsoring agencies--The Center for Research and Leadership Development in Vocational and Technical Education, The Research Training Branch of the U. S. Office of Education, and the American Vocational Association--will provide transportation to and from the institute, and the training and instructional materials. The enrollment will be restricted to 40 to 50. This limiting will permit a selectivity and screening from among the nominations requested in this letter. A form and self-addressed envelope are enclosed to assist you in supplying the desired response by mid-September, 1966.

Thank you for your assistance and I trust your enthusiasm and interest will result in effecting improved research and program development in vocational education.

mmf/
zp

A P P E N D I X D

TEAM ASSIGNMENTS

PRIORITY PROBLEMS IN VOCATIONAL EDUCATION FOR THE NATION'S BIG CITIES

Developed by Participants
of the
RESEARCH TRAINING INSTITUTE

TABLE OF CONTENTS

DESIGN FOR CAREER CHOICE*

I. Statement of the problem

The problem is one of inadequate information on the part of students in order to make realistic tentative career decisions while in school--and in time to receive vocational training while in the public secondary school. There is a responsibility on the part of the school system to provide this information.

The problem not only involves providing students with adequate information but would logically transcend into changing some misconceptions on the part of parents or others who might influence students in occupational choice.

This is a problem because the large majority of students in the large-city systems (60 to 70%) do not go on to advanced academic training and are seeking entry level employment immediately upon graduation from high school. To make his high school experience more meaningful, this career choice must be made in time to receive adequate training. (This does not imply that student will not change careers in the future).

Student, school, employers, parents, and society in general are all affected if a waste in talent occurs because of lack of information and occupational guidance.

At present many of the avenues used for the presentation of occupational information to students are of a "helter-skelter" or unplanned nature. These may include career day programs, in class vocational guidance by subject or vocational teachers, vocational counselors (in the few areas where they exist), regular counselors to a limited degree, home room situation, career units in academic subjects such as Social Studies and English, field trips, part time or cooperative work experience and by other informal methods.

II. Purposes and objectives

What if any are the desired behavioral objectives? What do you predict the results will show?

The general purpose is:

To provide the student (college bound or vocational) with adequate career and occupational information with the hope that this information will then be used in making career choices.

II. Purposes and objectives - continued

A more specific objective would be:

To provide the methods and procedures by which this information may reach the student and to determine the proper timing and approaches.

The behavioral objectives desired include:

(1) Self-realization of potential on the part of the student in terms of matching abilities with career requirements.

(2) Greater motivation on the part of the student to stay in school to pursue self-formed objectives.

(3) Better attendance at school.

(4) Successful job-entry and growth.

(5) More satisfied employees and employers.

III. Procedures needed to achieve the objectives

This would be defined as an action-research project or one leading toward the continuum of action research.

Phase I. Design instrument and gather data pertaining to present methods of presenting students with occupational information. (What they actually know at different intervals of school life).

(a) Formal methods.
(b) Informal methods.

Phase II. Analize and interpret data and formalize pilot programs. Provide feedback to those involved in making plans. Develop a demonstrative project.

Phase III. Implementation of model.
IV. Evaluation and dissemination of information.
V. Adjustments necessary to overcome limitations of study, etc.
VI. Decisions--as to expansion of the program, etc.

This would be a one city effort with two or more schools being involved. Testing would be in one city for ease of coordination but would be of application to all cities.

The subjects should be those students selected for the study in the pilot schools. Emphasis on students below 11th grade but with all years down through middle school (6 through 12) being involved.

III. Procedures needed to achieve the objectives

Instruments would need to be developed to determine if students subjected to the pilot program actually do receive more occupational information than those students who have not had the same procedures available to them.

(NOTE) A separate study could be conducted to determine if students do make more realistic career choices when provided with these raw materials or if their horizons are materially enlarged in respect to wide variety of potential careers.

Phase I could begin anytime. At least one year would be needed for the planning stage for the collection of data and the development of the model. For proper implementation and evaluation a 4 or 5 year longitudinal study would be involved.

The outcomes could be evaluated by a measurement of increase of occupational information possessed by students participating in project. (Pre-test, post test, controlled group or other designs).

The pilot and/or demonstration phase could be carried out in any urban area in which a large number of students are non-college bound.

IV. Resources

(a) Survey of current literature is needed to determine specialists who have done considerable study and writing on the topic of occupational choice (ex. Ginsberg).

(b) Possible agency or institution assistance might be obtained from colleges and universities, ERIC (information retrieval centers) The Center for Vocational and Technical Education, The Ohio State University.

(c) The following are possible funding sources:

1. Local school districts (research and pupil services funds).

2. Federal programs.

3. State ancillary funds.

4. Foundations (Ford, other).

V. Results

(a) What are the expected outcomes?
(b) How will they be implemented?
(c) Who takes the lead on getting the findings into practice?
(d) How will the big city vocational education program benefit?
(e) How will the students benefit?

(a) Expected outcomes

Improved and more effective methods of providing occupational information to students.

(b) Steps for implementation

Dissemination of results. Conduct pilot effort. Provide a set of guidelines.

(c) Program benefits

More motivation on part of students. Better acceptance of vocational programs on the part of industry.

(d) Student benefits

A more knowledgeable basis for career decisions. Self-realization and increased awareness on the part of the students.

---

*This proposed study of a big city problem in vocational education was drafted by the following individuals at the Research Training Institute, Denver, Colorado, December 5-9, 1966:

Mrs. Lois A. Luxner, Supervisor
Business Education and Distributive Education
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Mr. Haig Marashlian, Regional Occupational Center
Torrance Unified School District
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East Central Illinois Educational Center
Charleston, Illinois
Mr. Carl Q. Roberts,
Colorado Department of Employment
Denver, Colorado

EARLY IDENTIFICATION AND SELECTION PROCEDURES TO ASSURE A GREATER DEGREE OF SUCCESS IN SECONDARY VOCATIONAL PROGRAMS*

I. Statement of the problem

The problem is that of proper student selection to assure a greater degree of success in vocational programs and on the job.

This is a problem throughout the entire vocational education program. The problem is unusual because a majority of the students are affected either by improper counseling or erroneous selection.

II. Purposes and objectives

Purpose: To develop and test a practical process which will facilitate realistically the identification of student potential, in terms of interests, attitudes and capabilities, and which in turn could provide a sound basis for guidance prior to entrance in vocational programs.

Specific objectives:

(a) Develop valid early identification procedures.
(b) To assure success in program rather than failure resulting from misplacement.
(c) To encourage a realistic approach by student to their limitations.
(d) To provide means whereby the student plays a more active part in program selection.

Behavioral objectives:

(a) To develop an attitude of belonging, self worth, and acceptance within student.
(b) To provide knowledge that students efforts are worthwhile, respectable, and self-rewarding.
(c) To increase positive acceptance of vocational education in society in which he lives.

III. Procedures needed to achieve the objectives

(a) This should be a multiple city - multiple state effort.

(b) It should be a longitudinal study involving all students (6 year minimum).

(c) Measurements need to be developed and used with 7th and 9th graders to depict:

III. Procedures needed to achieve the objectives - continued

1. Aptitudes for specific skill areas.
2. Interests and attitudes toward skill areas.
3. Self salesmanship.
4. Social values within community.

(d) Pilot efforts would need to be carried out in at least one school per state.

IV. Resources

Team comprised of:

Academicians
Vocational educators
Psychometricians
Sociologists
Psychologists
Industry

V. Results

(a) Expected outcomes:

1. Develop selection procedures leading to appropriate vocational placement.

2. Develop attitudes of worth on the part of the student, parent, teacher and community.

3. Lead to a greater degree of successful job placement.

(b) Implementation:

Implemented by state and local administration with primary leadership by the Guidance Counselor.

(c) Program benefits:

Retention of students until public education is completed or until set of skills obtained. Decrease in unemployment.

(d) Student benefits:

Democratic educational opportunity guaranteeing a greater degree of success in educational programs and vocational placement.

*This proposed study of a big city problem in vocational education was drafted by the following individuals at the Research Training Institute, Denver, Colorado, December 5-9, 1966:

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Youngstown City Schools
Youngstown, Ohio
Mr. Melchior S. Estrada,
Director of Vocational Education
Campbell U. H. S. D., California
Miss Barbara Jane Garrett,
Director of Research
Portsmouth City Public Schools,
Virginia

USING OCCUPATIONAL TASKS AS A VEHICLE FOR FACILITATING BASIC EDUCATION AND OCCUPATIONAL LEARNING*

The project is influenced by three major ideas: (1) business and industry people continue to criticize the product of vocational program with "Your students can't communicate, can't compute, can't solve problems"; (2) the essence of major thought on goals of education may be summed by Woodring's words that the end product of an educational experience, regardless of the content, is the ability to make wise decisions and to communicate those decisions; and (3) with appropriate strategy, the lag from innovation to wide acceptance by schools has been decreased, e.g. "new" mathematics program was accepted by 75 percent of the schools in Allegheny County and West Virginia within five years.

1. Statement of the problem

The problem is one of providing a model for developing curriculums in numerous occupational fields in which the job task becomes the vehicle for contributing to basic education: problem solving, communication, computation, and relatedness of the occupational task to the social-economic scene in which a pupil functions.

Evidence of the problem is expressed by many employers in most occupational areas who indicate that students, with or without occupational skills, are frequently deficient in basic educational competence to justify their employment and/or advancement, with or without training. Further, students frequently lack the basic education skills to participate successfully (or even to want to participate) in retraining or special programs of occupational preparation.

The problem exists, we assume, because many students, though exposed to the usual classes of English, mathematics, social studies, have not found reason for developing the general education skills so necessary to participating and adapting to a changing work world. Yet, in the vocational field, the obsession toward teaching the job task has frequently blinded the vocational instructor from seeing the rich potential of getting students to talk, read, listen, write and manipulate numbers in solving problems related to that task. Frequently, too, these practical instructors have failed to capitalize upon this technique to show relatedness in the total world of work; the social, economic, and political world in which the vocational student must learn to adjust.

I. Statement of the problem - continued

We believe that the model could be demonstrated in any one of a number of occupational fields in which there was strong national leadership in an occupational area from education, labor and business.

In addition to comparisons of adaptation to work of students from a new curriculum, the model lends itself to such hypotheses as the following:

(1) Students from the new curriculum will be as proficient, if not more so, in performing tasks and adjusting to new tasks of a particular occupation as those from traditional programs.

(2) Tests of communication, computation, and problem solving will show a significant edge for those following the "new" versus current.

Built into this model must be a strategy for dissemination and acceptance by administrators and their vocational teachers.

II. Purposes and objectives

The objective is to bring about the development and adoption of curriculums in which occupational tasks are utilized as a vehicle for facilitating basic education and occupational learning.

Specific objectives are to gain cooperation, endorsement, and acceptance from necessary leaders, administrators, and classroom practitioners to develop, demonstrate, test, disseminate this broader approach to purpose for teaching a vocational task.

Behavioral objectives are in several classes and must be defined separately for each of the following groups: (1) educational leaders, (2) lay leaders interested in education, (3) media representatives, (4) educational administrators, (5) teachers, (6) students, and (7) the employment community (both labor and business).

III. Procedures needed to achieve the objectives (by phases)

(a) A demonstration of the model must emanate from or be promoted by some national group acting as a catalyst for planning and implementation. Such an organizing force we see in The Center for Vocational and Technical Education or the Great Cities Research Council.

III. Procedures needed to achieve the objectives - continued

(b) A national task force composed of leadership from business, labor, education and allied disciplines has the responsibility for defining current job tasks of an occupation for which the curriculum is to be constructed.

(c) A subgroup of the task force has the responsibility for developing specifications of speaking, listening, writing, reading, computing, and problem solving activities related to a job task. Also, specifications of the social, economic, political relatedness of the task are drawn by the subgroup.

(d) Writers, media specialists and practitioner groups are assigned to development of instructional units and methodology based on the specifications. As a strategy for later adoption, we propose that the instructional package be as nearly self-instructional as possible with many alternative media of presentation to fit a wide range of classroom situations. Assumed in the preparation is pilot testing, evaluation, and revision.

(e) Prior to demonstration in from 5 to 25 classrooms, we propose a summer workshop for instructional staff to (1) build in some "Hawthorne" effect, (2) to examine materials and develop classroom strategy, (3) to help the demonstrators define their goals and their role in the new system.

(f) Demonstration, evaluation, revision, dissemination phase. Obviously, criteria of selection and patterns of working with demonstrators and evaluation are critical.

(g) Concurrent with the total program development must come the development and implementation of a strategy pointed toward local school and community acceptance.

(h) We consider the continuing evaluation and modification of the curriculum to be the only realistic means of adjusting to the change we are encountering and will encounter.

Evaluation and Testing

It is beyond our scope to spell out the evaluation and testing necessary. We recognize the areas of evaluation, however, to be defined in our purposes:

1. Proficiency of graduate from these curriculums to get, hold and adapt in the changing market place for jobs.

Evaluation and Testing - continued

2. Growth in the basic educational competencies of communication, computation, and problem solving.

IV. Resources

As in similar curriculum revisions (mathematics, for example), successful implementation will require massive support in money and in persuasion--at local, state, and federal levels. Yet, the idea sounds so simple and so workable and so improved over current vocational curriculums, we expect the resources await the expansion of the idea to a specific occupational area without an excessive amount of outside pressure being applied.

V. Results

One is unable to identify all results of a baby-aborning. Yet, successful demonstrations of the model could; for example:

1. Provide pupils with a more realistic preparation for occupational change.
2. Make the product of the school more acceptable to the employing community.
3. Provide vocational educators with a growing self-respect of contributing toward worthy educational goals, and
4. Because of No. 3, improve the image of the field of occupational preparation.

---

* This proposed study of a big city problem in vocational education was drafted by the following individuals at the Research Training Institute, Denver, Colorado, December 5-9, 1966:

Dr. John Egermeier,
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Mr. Nelson W. Lowery, Director
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Albuquerque Technical-Vocational Institute, New Mexico

THE PROBLEM OF FINDING PROPERLY SUPERVISED WORK EXPERIENCE SITUATIONS FOR STUDENTS NOT PREPARED FOR O.V.T. PROGRAMS*

I. Statement of the problem

In large cities a major problem is finding properly supervised work experience situations for students that are not prepared for O.V.T.[1] programs.

In the "great cities" there is a need to become actively concerned with the development of plans for the employment of many school age students who must either enter college or become absorbed in the labor market. Large minority groups of low economic status must be prepared to enter the labor market.

Numerous opportunities exist for employment of <u>qualified</u> youth in the "World-of-Work" and many of the youth aspire to work opportunities. However, far too few of the inner-city youth have been able to obtain maximum benefit from the wide variety of vocational course offerings because they lack the prerequisites in basic skills and educational aspirations necessary for success in the courses.

The youth (the other American) live in virtual isolation from the larger affluent society. The isolation is accompanied by a poverty of experience, and, as a result, their full development of prerequisites necessary for attaining high standards of living, learning, and working in the broad society has been inhibited. The underdeveloped prerequisites include:

(a) A level of understanding, expectation and aspiration needed to support the school's efforts to promote intellectual growth and values and attitudes conducive to success in the world of work.

(b) Adequate communication skills, particularly reading skills, including an understanding of what reading is and the motivation to read for information and pleasure.

Before the youth can be adequately trained through regular vocational programs for positions, the schools must somehow provide for them an educational program supplementary in nature.

---

1. OVT - Occupational, Vocational, Technical

II. Purposes and objectives

(a) To develop a program that will upgrade the basic attitudes needed by youngsters to work effectively and adjust to society through a systematic program designed to offer realistic work experiences within a school situation.

The laboratory will be located within the school's jurisdiction and will be staffed by competent, well trained, certified school personnel.

(b) Develop a course of study and realistic experiences that would assist the students in developing for himself acceptable skills, standards, compentencies in the cluster of automotive occupations:

(1) Remedial work in basic academic disciplines.

III. Procedures needed to achieve the objectives

Before implementing a program of this type the following must be considered:

(a) Financing.

(b) Student selection.

(c) Staffing.

(d) Course of study.

(e) Facilities.

(f) Equipment.

(g) Scheduling.

The age limit would depend on State Labor Laws, and the age of Junior and Senior High students available.

Measurement:

(a) Ability and achievement test.
(b) Interest test and inventories.
(c) Differential aptitude.
(d) Minn. Vocational Inventory.

It should begin as soon as possible.

III. Purposes and objectives - continued

Evaluation:

Constant evaluation, built in change and evaluation.

Objective and subjective evaluation.

Time:

At least three to five years to bring a work situation within school jurisdiction.

IV. Resources

Leadership - A person interested in and dedicated to helping this type of youth.

Agency - Oil and automotive industries.

(a) Ford foundation.

(b) P.L. 88-210.

(c) P.L. 89-10.

(d) O.E.O.

(e) State Department.

(f) Rehabilitation.

V. Results

We expect to see changed student behavior as reflected in:

(a) Changed attitudes

(b) Increased understandings.

(c) Improved skills.

Disseminate this report by operating in-service training sessions with guidance, teaching, and administrative staff.

*This proposed study of a big city problem in vocational education was drafted by the following individuals at the Research Training Institute, Denver, Colorado, December 5-9, 1966:

Mr. Warren A. Collier, Coordinator of Work Orientation
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Dr. K. M. Eaddy, Director
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Mr. Edgar J. Hollwedel, Director of Vocational
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Mr. Robert V. Keck,
Oklahoma City Public School System, Oklahoma

MOTIVATION OF STUDENTS IN DEVELOPING ATTITUDES TOWARD VOCATIONAL GOALS*

I. Statement of the problem

The problem focuses upon the motivation of students in developing attitudes toward vocational goals.

1. (Where) The problem asserts itself at different grade levels depending upon locality, but primarily at entry into high school when the parents and student are planning career objectives.

2. (Who) It affects approximately 80% of the students in urban centers who do not go on to college and are faced with an immediate vocational choice.

3. (Alternatives) Traditional guidance methods are ineffective because of counselor-student ratio and because of the counselor's preoccupation with the academically-oriented student. Vocational counseling is generally neglected because most school counselors are themselves academically oriented.

4. (Is it possible?) Yes, the proposal would include the development of a program employing new ways and means of changing attitudes, establishing realistic objectives for each individual, and providing for successful experiences in general education and vocational exploratory subjects.

II. Purposes and objectives

(a) To raise the aspiration level of the student through the development of new ways and means of providing successful experiences.

(b) To develop learning situations that are real and are immediately meaningful and useful to the student.

(c) Attitude change toward -

1. Career objectives.
2. The student's role in a social setting.
3. A true understanding of self and an understanding of his potentials and limitations.

(d) Testing of proposed methods and means which should provide evidence to indicate more effective ways of reaching the student identified earlier (who generally has a limited exposure to cultural, social and occupational information).

III. Procedures needed to achieve the objectives

Steps to be carried out

(a) Research the literature to determine methods already used and found successful in - military services, industrial training organizations, MDTA, NYC, Adult education, Job Corps and lay and community agencies.

(b) Determine how these methods may be improved upon with other media such as programmed learning, CAI and other means such as clear explanation to other ethnic groups.

(c) Development of material sources and arrangement for social and cultural exposure.

(d) Test with a pilot program of dissemination of information.

(e) Evaluate individual and group changes as a result of this program participation at three and five year intervals.

Stages a, b, and c are nationwide in scope.
Stages d and e could be tested locally.

This program could be carried out in urban communities with 100,000 population or more.

Subjects - Upper elementary (6,7,8) or junior high school grade levels. The program is designed for the educationally disadvantaged and measurement criteria are needed to identify these students.

When - When student needs in a school system warrant such a study. In urban centers immediately.

Evaluation -

1. Observable data such as lowering of the drop-out rate.
2. Making realistic choices as compared to a profile based on the best guidance tools available.
3. Follow-up studies indicating the effectiveness of the student to adjust to work and social setting.

IV. Resources

(a) Personnel

See Stage (a) under procedures where materials and methods are being researched.

(b) Funds

ESEA, Title I

* This proposed study of a big city problem in vocational education was drafted by the following individuals at the Research Training Institute, Denver, Colorado, December 5-9, 1966:

Dr. Jerry C. Olson, Director
Pittsburgh Board of Public Education,
Pennsylvania
Mr. Ambrosio J. Ortega, Administrative Assistant
Albuquerque Technical-Vocational Institute,
New Mexico
Mr. Ernest L. Rush, Director of Industrial Education
Little Rock Public Schools,
Arkansas
Mr. N. Gunnar Fransen, Director
Division of Adult and Occupational Services
Rockford Public Schools,
Illinois

THE RELATIONSHIP OF "IMAGE" TO CHOICE OF A VOCATIONAL PROGRAM, PERFORMANCE IN THAT PROGRAM, AND PERFORMANCE IN THE FIELD*

I. Statement of the problem

Generally, the problem is that, while we believe the "image" of different vocations and of related vocational education affects the numbers and types of students who choose different programs and affects the performance of these students in the program and in the actual vocation in later life, we have no hard data (at least in our system) as to how image operates and how it can be changed.

To clarify the remainder of this paper, a definition of "image" is needed. We see image as having two components, one informational in nature and one affective. Under informational we include:

(a) Knowledge of what the vocation actually involves, that is, what a person engaged in it actually does, the conditions under which he works, his opportunities for advancement, the salary he is likely to begin with and to attain later.

(b) Knowledge of entry requirements in the vocation and of further educational needs for advancement in the vocation. What are the demands of a person wishing to enter?

Under affective we include:

(a) The prestige level of this vocation relative to other vocations. The perceived desirability of being engaged in this vocation.

(b) Subconscious reaction to the vocation or general feelings toward the vocation. We mean here the kind of response which could probably be measured with the semantic differential.

We propose to delimit our study at this point to a specific vocation--cosmetology. We chose this arbitrarily as a popular vocation with a sizeable number of students in the program. We propose to conduct a "pilot" study at first to test the feasibility of the approach. If it proves to be meaningful in the cosmetology area, we will expand our efforts across a broad spectrum of vocations.

I. Statement of the problem - continued

We feel that the lack of knowledge of the relationship of image to entry and later performance is widespread. We assume for purposes of the assignment that it is a problem in the school district in which we work.

We know of no alternatives that are being tried to solve the problem.

We feel the problem is researchable, and we will demonstrate why in the remainder of this paper.

II. Purposes and objectives

Generally, the purpose is to determine the relationship of image of cosmetology to behavior at different times in the student's career and through this determination to give the vocational department of our school district some information on the kinds of image building activities which are desirable. The points in time in which we are interested are: prior to the choice of a vocational program (at 10th grade in our district), shortly after entering the cosmetology program, just before completing the cosmetology program, and after a year at work in the field.

Specifically, the objectives are to determine how the two components of image, informational and affective, relate to:

(a) Whether or not the cosmetology program is selected.

(b) Performance in the cosmetology program after selection in terms of 1) staying with the program through graduation and 2) performance on tests and other measures of success in the program.

(c) Performance in the vocation after graduation in terms of 1) success in quick entry into the vocation, 2) level of beginning salary, 3) success in holding a job, and 4) quality of performance on the job according to the employer.

Another specific objective is to determine changes in the student's image of cosmetology before, during, and after training and after experience in the field and to relate these changes to the types of behavior indicated above.

Desired behavior objectives are twofold. At a methodological level, the objective is to validly and reliably measure image as we have defined it. At a substantive level, we hope the

II. Purposes and objectives - continued

information we gain will assist our vocational department to achieve these behavioral objectives:

(a) Selection of cosmetology by a "desirable" number of students.

(b) A high rate of retention of students in the program or, if they leave this specific program, a move into another program in the school.

(c) A high level of performance by students in the program in terms of their mastery of needed skills and knowledge and of the scores they achieve on tests.

(d) Success by graduates in getting a job, at a satisfactory salary level, soon after completing the program.

(e) Success by graduates in holding a job and in performing at an acceptable level in it.

We predict that the two components of image will relate at a significant level to each other. We also predict that each will relate positively (factually accurate and affectively desirable) and at a significant level to selection of the program and to satisfactory performance in it and on the job.

III. Procedures needed to achieve the objectives

The study can be broken down into stages as follows:

(a) All 10th graders will be asked to indicate probable areas of emphasis (including cosmetology) in September of 1967.

(b) All of those indicating a possible intention to enroll in cosmetology will be given the image measure in November of 1967.

(c) A random sample of those who do not indicate intention to enroll in cosmetology will also be given the measurement. This sample will be approximately equal in size to the group indicating a possible intention to enroll.

(d) Test scores, course and grade data, life-record data, etc. will be collected on the two groups during the 1967-68 school year from school records.

III. Procedures needed to achieve the objectives - continued

(e) Students enrolling in cosmetology will be retested in October of 1968, that is, shortly after entering the program in 11th grade.

(f) Students nearing completion of the program will be retested in April of 1970.

(g) Those employed as cosmetologists will be tested again in April of 1971.

This information will give a longitudinal study of a single group. To get an early indication of the relationships, students in 11th grade, in 12th grade, and employed will be tested in 1967-68. This will give indications at the desired developmental points, but with different groups of students at each point.

Data to be collected for each subject include:

(a) Results on various administrations of the image measuring instrument.

(b) GPA.

(c) Life-record data, e.g. socio-economic status, age, sex, etc.

(d) Interest score on a suitable test.

(e) Attendance rate and other indications of inschool behavior.

(f) Intelligence score or other indication of general ability.

Analysis techniques will include:

(a) Factor analytic techniques will be used to identify the basic dimensions of "image" and to assist in designing and scoring the measuring instruments.

(b) General linear hypothesis tests will be conducted to answer the following questions, controlling for test scores, GPA, etc: 1) Has the image of successfully employed cosmetologists changed since 12th grade? Since 11th grade? Since pre-enrollment? 2) Do enrollees and non-enrollees in cosmetology hold different images? 3) Do those completing the program hold different images toward cosmetology than those not completing it?

III. Procedures needed to achieve the objectives - continued

(c) Correlational techniques will also be used to test the relationship of image, measured at different points in time, to indications of relevant behavior such as performance on tests and employer's ratings.

IV. Resources

Responsibility for this effort will be vested in the Research Division of our district. However, the study will be a joint effort of the Research Division and the Division of Vocational Educational, and resources of both groups will be merged in the effort.

Others may be used on a consulting basis, though we feel that actual conduct of the study should be internal to our district, that is, we do not feel this is the type of study which lends itself to joint conduct. Persons or agencies who may be useful on a consulting basis include:

(a) The State Licensing Board for Cosmetology.

(b) Staff members of the State Department of Public Instruction.

(c) Vocational and research specialists in our neighboring university.

(d) Local employers of cosmetologists.

(e) Members of the psychology division of the district and/or of the university.

We feel that the school district should be able to fund this study internally, though we are not adverse to outside help if we can get it. We feel the effort is important enough, however, that it should not depend on outside funding. Possible outside sources include:

(a) Title III of ESEA.

(b) The Cosmetology Association.

(c) The State Department of Public Instruction.

(d) Vocational Act of 1963.

(e) State Vocational Department Ancillary Funds.

V. Results

From this study we hope to learn:

(a) The difference in image of cosmetology between those who select this program and those who do not; whether this difference is related to other characteristics of pupils, such as SES and past performance in school.

(b) The change in image over time.

(c) The relationship of the image of cosmetology and its change in time to degree of success in the vocational program; whether or not this relationship is affected by other student characteristics.

(d) The relationship of image to opportunities and promotion on the job.

Results of the study will be discussed with vocational education personnel and the implications, conclusions, and recommendations agreed to. A joint report, satisfactory to both vocational educational and research, will be prepared and will be distributed to the top administration and board members of the district and to such other persons as the vocational education division may desire. The vocational educational division will, of course, be responsible for implementing new programs or any changes in current programs which results indicate are needed.

Results of the study will give the vocational education division and the district guidance on the kinds of information which should be given to pupils prior to their selection of a vocational education program. It will show how the image of vocational education on the part of students relates to success both in the program and on the job, and this will give leads on both the kinds of information offered in the program and the manner of instruction. The district will learn how the image of cosmetology differs among students of different backgrounds and whether these differences interact with background on success achieved later in the program and in the field.

One of the most important outcomes of this particular study will be an indication of the feasibility of the approach. This is a pilot study, deliberately limited to a single field. If the approach seems practical and the results useful to vocational education personnel, it can be broadened over a wide range of vocational education programs.

V. Results - continued

Students in our district will benefit from this study because a realistic number of them will be guided into cosmetology as a vocation, because the program of instruction in cosmetology will be improved to some extent, and because chances for success in the field of cosmetology will be increased.

*This proposed study of a big city problem in vocational education was drafted by the following individuals at the Research Training Institute, Denver, Colorado, December 5-9, 1966:

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Mr. Carroll B. Coakley, Assistant Director
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Dr. John L. Hayman, Jr., Director of Research
School District of Philadelphia, Pennsylvania
Mr. Vernon L. Hendrix
University of Minnesota - Minneapolis, Minnesota

A SURVEY TO DETERMINE THE ATTITUDES OF SELECT GROUPS IN REGARDS TO VOCATIONAL-TECHNICAL EDUCATION*

I. Statement of the problem

The problem is to determine the attitudes of select groups in regard to vocational education, i.e., high school students, counselors, parents, the lay public, college and university professors, board of education members, business and industry leaders, vocational education instructional staffs, and school administrators.

Some criteria indicating that a problem exists are:

(a) The number of students enrolled in vocational education at the high school level.

(b) The amount of financial support allocated to vocational education compared to general education.

(c) The type and capabilities of students now enrolling in vocational education.

(d) The increasing demands of industry for the more competent technically trained individual.

II. Purposes and objectives

The general purpose of the study is to secure objective information which will provide a basis for appropriate action based upon what is learned. The eventual aim is to raise the status of vocational education programs. It is predicted that the results will indicate:

(a) That the attitude of high school students toward vocational education will be that the status of vocational education training is less than that of the college-bound student.

(b) That the attitude of the parents toward pupils enrolled in vocational education will be less favorable than toward those students enrolled in college-bound curriculum.

(c) That counselors will be more apt to show favorable attitudes towards the academically inclined students and enroll the slower learners in the vocational education courses.

II. Purposes and objectives - continued

(d) That school board members will be more inclined to stress reading, writing, and arithmetic and the academic college-bound track than support for the vocational education non-college-bound track.

(e) That the lay public will put greater stress on developing college-track curricula than vocational education curricula.

(f) That institutions of higher learning will select more high academic achieving general education track students than high achieving vocational education track students.

(g) That the attitudes of vocational education students themselves and of vocational education teachers will be lower than that of high achieving college track students and their teachers.

III. Procedures needed to achieve the objectives

The study can be broken down into stages or phases; e.g., attitudes of students at stages such as sixth grade or seventh grade, ninth grade or tenth grade, and twelfth grade, correlated with the educational programs such as 6-3-3-, 6-4-4-, and so forth.

The study could be broken into three operational phases. During the planning stage phase, the instruments to be used would be perfected and selected. Detailed plans for the random selection of subjects to be interviewed would be made. Previous on-going vocational education research would be studied and interviewees trained. A Pilot program would permit the improvement of techniques to be used in the second operational stage which would deal with the gathering of information. Those approaches found to be feasible during the pilot study would be utilized in the operational phase, and information gathered which could be evaluated in ways which would give meaningful answers to the questions to which we were seeking answers.

During phase three, the data would be processed, the report analyzed, and guidelines established for implementing the study. Information gathered would provide a basis for determining necessary steps to maintain a change or improve the image discovered. The proposed study could well be a one-city effort or could be carried on in selected cities of similar size, geographic area, and with similar problems.

III. Procedures needed to achieve the objectives - continued

It is conceivable that cities such as Topeka, Oklahoma City, and Denver might be involved, although the subjects of the survey will be the lay public, the board members, the teachers, the counselors, the administrative personnel, members of vocational education groups, the students, business, and industry. The primary methods of getting at attitude would be:

(a) Pupil preferences on standardized tests such as Kuder-Strong and others at grades nine, possibly seven, ten, and twelve.

(b) The number of students counselors recommend for the vocational education track versus the number recommended for the academic track.

(c) The analysis of the student's academic achievement, comparing those recommended for non-vocational educational pursuits with those recommended for vocational education pursuits.

(d) An evaluation of the criteria utilized by counselors in institutions of higher learning in the selection of entering college freshmen other than the usual testing procedures; i.e., academic tracks of academic subjects opposed to the vocational education tracks.

The unique aspect of the proposed study would involve the currency or timir of the study, the recent information provided, and the l les in which these data would be gathered.

IV. Resources

No pilot or demonstration effort in existence is presently known; however, the regional educational laboratory should be consulted for any on-going source material.

Leadership in this effort might be provided by such professional groups as the American Association of School Administrators, the National Association of Secondary School Principals, the American Vocational Association, the various regional educational laboratories, the ESEA grant, the Center for Vocational and Technical Education of the Ohio State University, and various local and state vocational educational institutions.

V. Results

It is anticipated that the information gathered will provide an objective factual basis by which the status of vocational education can be determined. Such information will then provide direction for local action.

The selection and choice of a problem cannot in any way be construed as a primary interest of this committee of four. It is recognized that such a brief formulation as that contained in the present working draft constitutes at best a tentative proposal. Much more work and effort would of necessity be required before operational methodology and procedures could be formulated.

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*This proposed study of a big city problem in vocational education was drafted by the following individuals at the Research Training Institute, Denver, Colorado, December 5-9, 1966:

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Dr. Joseph E. Brzeinski, Director of Research
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Mr. Lawrence R. Gaston, Director of Research
Topeka, Kansas Public Schools
Mr. Max D. Hartdegen,
East Side Union High School District, San Jose, California

IDENTIFICATION AND LOCATION OF LOW STATUS ATTITUDES AFFECTING DECISION MAKING IN VOCATIONAL EDUCATION*

I. Statement of the problem

Historically vocational education has been relegated a low status position in the total educational arena. In the last decade new focus has been brought to bear on vocational education with great increases in amounts and sources of funds and accompanying expansion of programs. However the attitudes of low status seems to remain among vocational education staff members and also is reflected by a reluctance of students to accept vocational training.

The problem as we see it centers around the effects that attitudes of low status have on decision-making at various levels of vocational instruction, supervision and administration.

The problem of attitudes seems to be universal both horizontally and probably vertically in school systems, but at varying degrees. We feel it has adverse effects in the total vocational program, and specifically in areas of budget, teacher recruitment, student participation, community acceptance and faculty interpersonal relationships.

The ability to research this problem would be dependent on the development of a useable instrument. We would suggest that the development of suitable instruments be a concerted effort of educators, psychologists and sociologists.

II. Purposes and objectives

The general purpose of the proposal is to determine whether, in fact, feelings of low status do exist, who holds these feelings or attitudes, and to what degree, how they are perpetuated and by whom, and, how these feelings effect decision-making.

We hypothesize that attitudes of low status <u>do</u> exist and at varying degrees at different staff levels; and that they do affect decision-making in relation to the intensity of the attitude held.

III. Procedures needed to achieve the objectives

Possibly the proposal could be developed in stages as follows:

III. Procedures needed to achieve the objectives - continued

(a) Determination whether low status attitudes do exist, where (at what staff level), and to what degree or intensity;
(b) The effect of the attitudes on decision-making; and
(c) Possible development of approaches to counteract or dispell the attitudes.

This effort would probably best lend itself to a multi-city appróach, and encompassing all school personnel. Cities of somewhat approximate size would probably create a better data bank.

Instruments should be designed to measure a continuum of attitudes, and a pilot test should, of course, be made of the instrument.

IV. Resources

Such a study would seem to lend itself to a regional educational research laboratory for implementation.

V. Results

Efforts to eliminate attitudes of low status held by vocational educators must come from within, and would have to be psychological in nature. The eventual recipient of improvement must be the student. Increased attitudes of status would reflect from staff to students.

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*This proposed study of a big city problem in vocational education was drafted by the following individuals at the Research Training Institute, Denver, Colorado, December 5-9, 1966:

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Division of Vocational Education - UCLA, Los Angeles
Mr. Carl H. Turnquist, Division Director,
Vocational Education
Detroit, Michigan

DEVELOPMENT OF REALISTIC UNDERSTANDINGS WITHIN THE COMMUNITY CONCERNING VOCATIONAL EDUCATION*

I. Statement of the problem

(a) To effectively develop a program of realistic understanding within the community concerning vocational education.

(b) This is a national problem.

(c) This is a problem because it prevents potentially qualified students from taking advantage of vocational education in terms of their real abilities and interests.

Statistics show that approximately 80% of all students are affected.

II. Purposes and objectives

(a) General

To develop a program of realistic understandings within the community concerning vocational education.

(b) Specific

To disseminate information relative to the educational opportunities available in vocational education to the community.

Vocational classes offered in the schools.
Orientation programs offered in the schools.
Guidance opportunities and programs offered in the schools.
Qualifications necessary for entrance into various Vocational Courses.

To provide an understanding of the relationship between Academic Education and Vocational Education - a truly comprehensive Career Oriented education.

To disseminate information relative to the present job market.

To provide the community with information relative to the future scope of vocational education.

II. Purposes and objectives - continued

(c) Behavioral

To create an acceptable attitudinal climate within the community towards vocational education.

(d) Predictions

No hypotheses.

III. Procedures needed to achieve the objectives

(a) The study could be broken down into these stages:

1. Formation of research council
2. Community identification -
   parents business
   students schools
   industry other
3. Identification of existing data
4. Formulation of research procedure
5. Evaluation

(b) This would not necessarily be a one city effort - any city that feels the need might participate.

(c) The primary measurements to be made would be:

1. Attitudinal measurements of the community before and after the study.

2. Number of students involved in vocational education before and after the study.

(d) The growth of the vocational education program within the community would be the evaluation.

IV. Resources

(a) Leadership

Industrial leaders of the community
Advertising media of the community
Research and development centers
State Departments of Education
Universities, colleges, schools
Labor organizations
Government agencies
Churches and Councils
Social agencies
Other

IV. Resources - continued

(b) Funding

Public or private agencies
Grants - local, state, or federal

V. Results

Expected outcomes

(a) A realistic understanding of vocational education within the community.

(b) A measureable change in community attitude as reflected in increased participation in vocational education.

(c) A more desireable and satisfying vocational choice for the student.

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* This proposed study of a big city problem in vocational education was drafted by the following individuals at the Research Training Institute, Denver, Colorado, December 5-9, 1966:

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Cincinnati Public Schools,
Ohio
Miss Margery Trott, Supervisor
Detroit, Michigan

OUTLINE OF PRE-SERVICE TRAINING*

I. Statement of the problem

The shortage of trained teachers of T. & I. subjects and the introduction of many federally funded projects such as ESEA and MDTA, make it necessary for school districts to recruit teachers from industry. The short supply of teachers seems to be nationwide in scope, therefore, a pre-service instructional period is necessary to inform the skilled industrial worker about teaching. The problem is what kind or type of training should be given.

II. Purposes and objectives

The development of an effective training program in teaching skills and techniques for people from industry who will teach in the T. & I. areas. The objective of this training program would be to orient the industrial employee into the teaching profession.

III. Procedures needed to achieve the objectives

A survey of training methods used in cities with 500,000 population or more (approximately 25 cities) would be conducted by contacting the Director of Vocational Education in these cities. A survey of the State Director of Vocational Education in the states in which these approx. 25 cities are located to find the certification requirements in the several states would be conducted. An analysis of the two surveys should be prepared.

IV. Resources

Using the resources and resource personnel of The Center for Vocational and Technical Education at The Ohio State University or Wisconsin University to help evaluate a composite training program.

V. Results

A proposed training program that could serve as an outline for a course for instructing new teachers of T. & I. subjects, who had not had previous teaching

experience. This outline might lead to co-operation between states for the entry of teachers into that state from the other state.

With the shortage of teachers in the T. & I. areas, this outline program should provide a way to instruct skilled workers who wish to become teachers in their trade area.

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* This proposed study of a big city problem in vocational education was drafted by the following individuals at the Research Training Institute, Denver, Colorado, December 5-9, 1966:

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A P P E N D I X

THE GUIDE USED

IN

OUTLINING THE PROPOSED STUDIES

Identify a Big City problem in Vocational-Technical or Occupational Education.

I. Statement of the problem

What is the problem? Where is it a problem? Why is this a problem - who is affected? List alternatives that are now being tried to solve the problem. Is it researchable?

II. Purposes and objectives

What is the general purpose? The specific objectives?
What if any are the desired behavorial objectives?
What do you predict the results will show?

III. Procedures needed to achieve the objectives

Can the study be broken down into stages or phases? What are they ?
Is this a one city effort?
What cities do you suggest as study sites?
Who are the subjects?
What measurements need to be made?
When should this begin? What is your time schedule?
How would you evaluate the effort?
Where might the pilot and demonstration efforts be carried out?
What is unique about this approach?

IV. Resources

Who do you know that could give leadership to this effort?
What agencies, institutions, funding sources do you suggest?

V. Results

What are the expected outcomes?
How will they be implemented?
Who takes the lead on getting the findings into practice?
How will the big city vocational education program benefit?
How will the students benefit?

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